



## KOREAN PATENT ABSTRACTS

(11)Publication number: **1020030047189 A**(43)Date of publication of application: **18.06.2003**(21)Application number: **1020010077611**(71)Applicant: **LG ELECTRONICS INC.**(22)Date of filing: **08.12.2001**(72)Inventor: **SUNG, GYEONG HWAN**(51)Int. Cl **H04L 12/26****(54) APPARATUS FOR DETECTING SIGNALS BY  
PLD IN LOOPBACK MODE OF ETHERNET LINE  
CARD****(57) Abstract:**

**PURPOSE:** An apparatus for detecting signals by a PLD(Program Logic Device) in a Loopback mode of an Ethernet line card is provided to perform the Loopback mode in an SERDES(Serialize/Deserialize) unit by performing a signal detecting function in the PLD when testing the Loopback mode between a network processor and the SERDES unit.

**CONSTITUTION:** A network management processor(201) manages an OSI3(Open Systems Interconnection 3) layer. An SERDES unit(202) mutually changes a serial stream and a parallel stream. An optic module(203) interchanges an electric signal of the serial stream with an external optical signal. A CPU(204) outputs information for designating a Loopback mode assigned in a memory. A PLD(205) stores Loopback mode information by the CPU(204), and outputs a Loopback mode operating signal to the SERDES unit(202) so that the SERDES unit(202) performs a self looping test.

